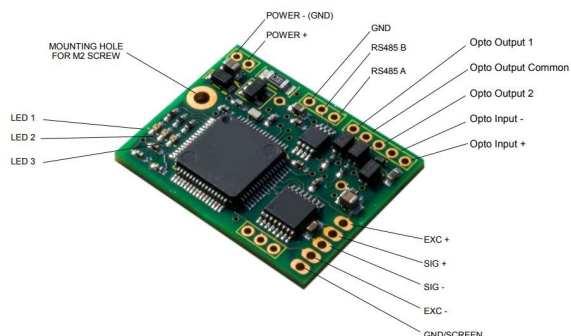


MINIATURE LOAD CELL CONVERTER WITH BUILT IN DATA-LOGGER MODEL: LCIC-BAT

This smart and advanced load cell converter will turn any strain-gage load cell to a “smart” digital load cell. Very low power consumption allows a load cell to run on standard batteries for several years! Built in temperature measurement and time/date clock. Standard RS485 communication with open protocol allows easy access from any PC / PLC

LCIC-BAT V002 Connection Diagram



Main Features:

- ◆ Very low power consumption saves the need for an external power supply. Will run on 3 or 4 standard AA batteries for several years (depending upon the required sampling rate)
- ◆ Standard RS485 communication open protocol with up to 64 units connected along one cable
- ◆ Built-in date / time clock + temperature measurement that also compensates for L/C zero drift
- ◆ Built-in Data-logger that stores up to 8,000 readings with date/time and temperature. Customer can easily set up the intervals between readings to be seconds, minutes, hours or even days...
- ◆ Multi-point calibration to improve load cell linearity or, direct entry of a mV/V calibration table with linearization. Calibration allows to choose readings resolution and engineering units as well as max load cell capacity to avoid overload. Calibration can be named e.g. S/N 123456 and locked with a password
- ◆ Supplied with free PC applications, that allow direct reading of weight/force, temperature as well as setup of the sampling time for the data logging feature
- ◆ Load cell can be used for tension and compression after the calibration, while zero remains in the middle

Typical applications:

- ◆ Measuring testing and data-logging of forces of ground anchors, rock bolts etc.
- ◆ Monitoring and data logging weights and temperatures in sites that has no power supply
- ◆ Option for “Tailor made” firmware to fit any special requirement

Main Specifications:

Bridge Excitation: 3.3v

Minimum sensor impedance: 150 Ω

Bridge sensitivity: $\pm 3\text{mV/V}$

External power supply: 4.0V-24V

Internal A/D resolution: 24bit

Internal sampling rate: Up to 1200 samples/second

Operating temperature range: -30c — +70 c

I/O: 2 outputs + 1 input Opto- isolated

Communication: Open RS485 protocol

Size: 30mm X 23mm